Title: Method, Program and System of Forming Visual...
Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
Docket No.: 393032041900

FIG. 1

Title: Method, Program and System of Forming Visual...
Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
Docket No.: 393032041900
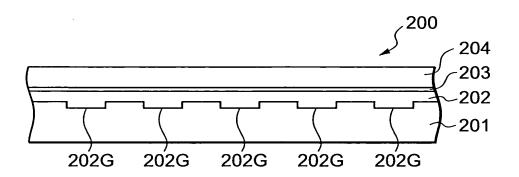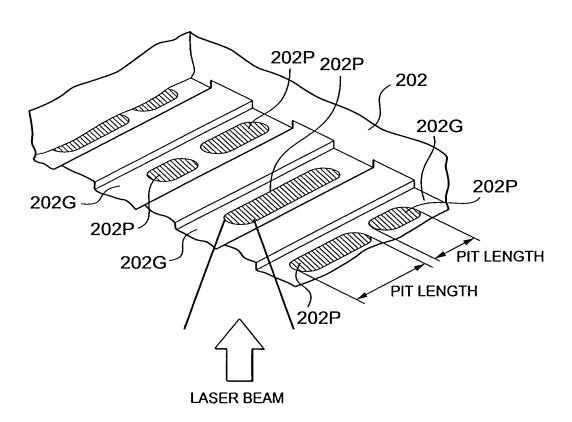
FIG. 2

200

204
203
202
201

202G 202G 202G 202G 202G

FIG. 3

202P 202P

202

202G

202G

202P

202P

202G

202P

PIT LENGTH

PIT LENGTH

202P

LASER BEAM

Title: Method, Program and System of Forming Visual...
Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
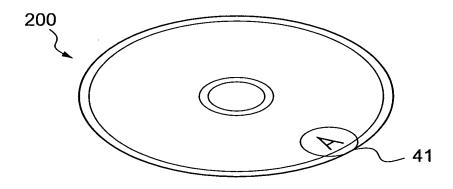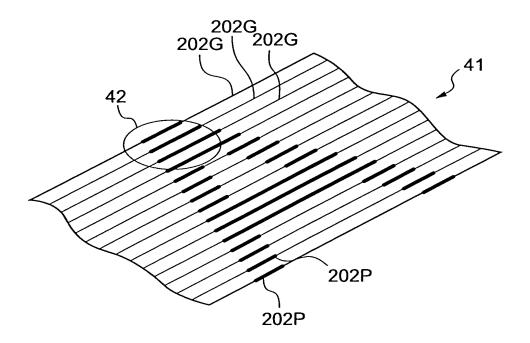Docket No.: 393032041900

FIG. 4

FIG. 5

Title: Method, Program and System of Forming Visual...
Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
Docket No.: 393032041900

FIG. 6

202P 202 42

202G

202G

202P

202P

LASER BEAM

FIG. 7

202P

202P

202P

Title: Method, Program and System of Forming Visual...
Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
Docket No.: 393032041900

FIG. 8

202P

202P

202P

Title: Method, Program and System of Forming Visual...
Inventor(s): Morito MORISHIMA, et al.
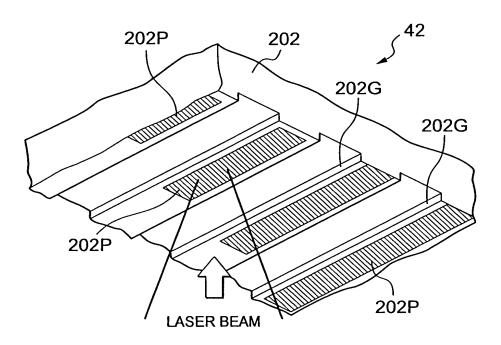Application No.: Not yet assigned
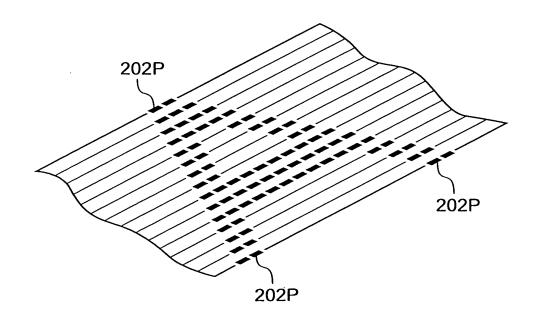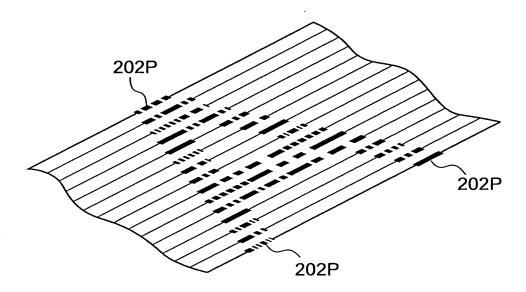Docket No.: 393032041900

FIG. 9

Title: Method, Program and System of Forming Visual...
Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
Docket No.: 393032041900

FIG. 10

FRAME SYNCHRONIZATION

SUB CODING

S0 S1

MAIN DATA Dmain

98 FRAMES
(one SUB CODING FRAME)

SUB CODE DATA Dsub

FRAME SYNCHRONOUS DATA Dframe

FIG. 11

FRAME NO.								
1				S0				
2				S1				
3	P1	Q1	R1	S1	T1	U1	V1	W1
4	P2	Q2	R2	S2	T2	U2	V2	W2
5				•				
6				•				
⋮				•				
95	P93	Q93	R93	S93	T93	U93	V93	W93
96	P94	Q94	R94	S94	T94	U94	V94	W94
97	P95	Q95	R95	S95	T95	U95	V95	W95
98	P96	Q96	R96	S96	T96	U96	V96	W96
1				S0				
2				S1				
⋮	P1	Q1	R1	S1	T1	U1	V1	W1
	P2	Q2	R2	S2	T2	U2	V2	W2

one SUB
CODING
FRAME

Title: Method, Program and System of Forming Visual…
Inventor(s): Morito MORISHIMA, et al.
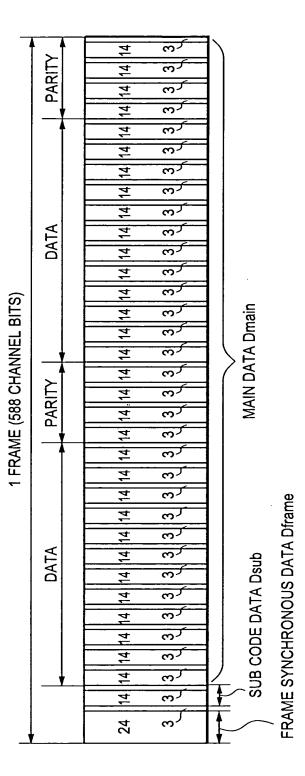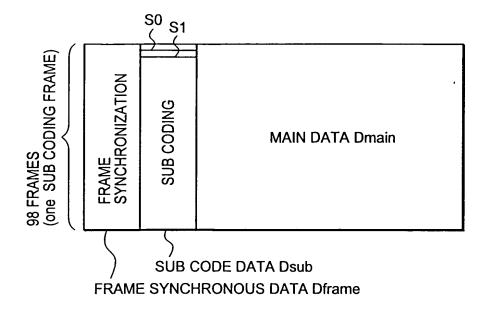Application No.: Not yet assigned
Docket No.: 393032041900

FIG. 12

FRAME NO.	DETAILS OF SUB CODE DATA Dsub						DETAILS OF VISIBLE IMAGE FORMATION DATA Dx		
	S0						S0		
	S1						S1		
1									
2									
3	P1	Q1	R1	S1	...	W1	Cm1	PWM1	(0,1,2,3,4,5,6)
4	P2	Q2	R2	S2	...	W2	Cm2	PWM2	(0,1,2,3,4,5,6)
5	P3	Q3	R3	S3	...	W3	Cm3	PWM3	(0,1,2,3,4,5,6)
6	P4	Q4	R4	S4	...	W4	Cm4	PWM4	(0,1,2,3,4,5,6)
7	P5	Q5	R5	S5	...	W5	Cm5	PWM5	(0,1,2,3,4,5,6)
8	P6	Q6	R6	S6	...	W6	Cm6	PWM6	(0,1,2,3,4,5,6)
9	P7	Q7	R7	S7	...	W7	Cm7	PWM7	(0,1,2,3,4,5,6)
10	P8	Q8	R8	S8	...	W8	Cm8	PWM8	(0,1,2,3,4,5,6)
11	P9	Q9	R9	S9	...	W9	Cm9	PWM9	(0,1,2,3,4,5,6)
12	P10	Q10	R10	S10	...	W10	Cm10	PWM10	(0,1,2,3,4,5,6)
13	P11	Q11	R11	S11	...	W11	Cm11	PWM11	(0,1,2,3,4,5,6)
14	P12	Q12	R12	S12	...	W12	Cm12	PWM12	(0,1,2,3,4,5,6)
15	P13	Q13	R13	S13	...	W13	Cm13	PWM13	(0,1,2,3,4,5,6)
16	P14	Q14	R14	S14	...	W14	Cm14	PWM14	(0,1,2,3,4,5,6)
17	P15	Q15	R15	S15	...	W15	Cm15	PWM15	(0,1,2,3,4,5,6)
18	P16	Q16	R16	S16	...	W16	Cm16	PWM16	(0,1,2,3,4,5,6)
19	P17	Q17	R17	S17	...	W17	Cm17	PWM17	(0,1,2,3,4,5,6)
20	P18	Q18	R18	S18	...	W18	Cm18	PWM18	(0,1,2,3,4,5,6)
...	...	...	...	...	...	...	...	...	...
95	P93	Q93	R93	S93	...	W93	Cm93	PWM93	(0,1,2,3,4,5,6)
96	P94	Q94	R94	S94	...	W94	Cm94	PWM94	(0,1,2,3,4,5,6)
97	P95	Q95	R95	S95	...	W95	Cm95	PWM95	(0,1,2,3,4,5,6)
98	P96	Q96	R96	S96	...	W96	Cm96	PWM96	(0,1,2,3,4,5,6)

Title: Method, Program and System of Forming Visual...
Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
Docket No.: 393032041900

FIG. 13

REFERENCE LINE

LINE 2,COLUMN 0

200(202)

LINE 2,
COLUMN 1

LINE 1,
COLUMN 0

LINE 1,
COLUMN 1

LINE 2,
COLUMN 2

LINE 1,
COLUMN 2

LINE 1,
COLUMN 3

LINE 0,
COLUMN 0

LINE 0,
COLUMN 1

202G

LINE 0,
COLUMN 2

Title: Method, Program and System of Forming Visual...
Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
Docket No.: 393032041900

FIG. 14

```
        ┌─────────────┐
        │    START    │
        └─────────────┘
               │
               ▼
   ┌──────────────────────────┐
   │   READ BIT MAP DATA      │ ～ Sa1
   └──────────────────────────┘
               │
               ▼
   ┌──────────────────────────┐
   │ DATA CONVERSION FROM XY  │ ～ Sa2
   │ COORDINATE DATA INTO CLV │
   │ COORDINATE DATA          │
   └──────────────────────────┘
               │
               ▼
   ┌──────────────────────────┐
   │ STORE DATA IN IMAGE MEMORY│ ～ Sa3
   │ 110G, THEN OUTPUT DATA   │
   └──────────────────────────┘
               │
               ▼
   ┌──────────────────────────┐
   │ DRAW IMAGE ON OPTICAL DISK│ ～ Sa4
   │ 200                      │
   └──────────────────────────┘
               │
               ▼
        ┌─────────────┐
        │     END     │
        └─────────────┘
```

FIG. 15(a)   # FIG. 15(b)

RECTANGULAR COORDINATES

Title: Method, Program and System of Forming Visual...
Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
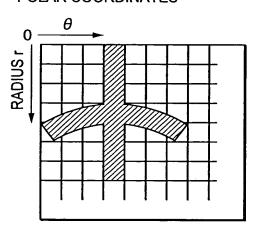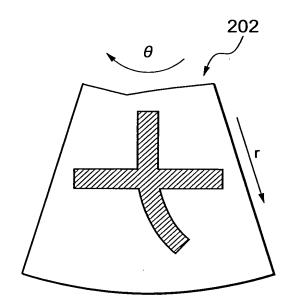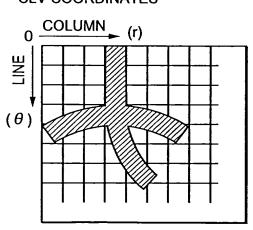Docket No.: 393032041900

FIG. 16(a)

POLAR COORDINATES

FIG. 16(b)

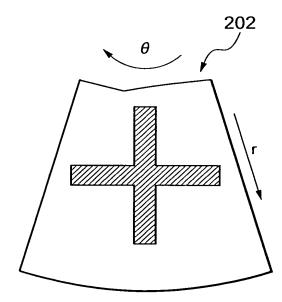## FIG. 17(a)

CLV COORDINATES

FIG. 17(b)

Title: Method, Program and System of Forming Visual...
Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
Docket No.: 393032041900

FIG. 18

Title: Method, Program and System of Forming Visual...
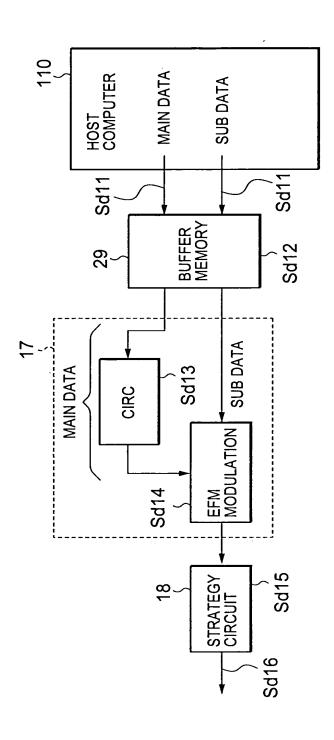Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
Docket No.: 393032041900

FIG. 19

Title: Method, Program and System of Forming Visual...
Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
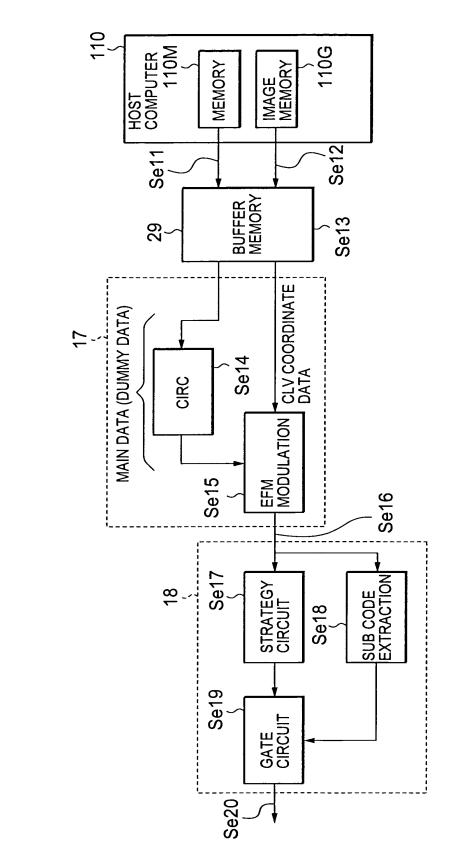Docket No.: 393032041900

FIG. 20

Title: Method, Program and System of Forming Visual...
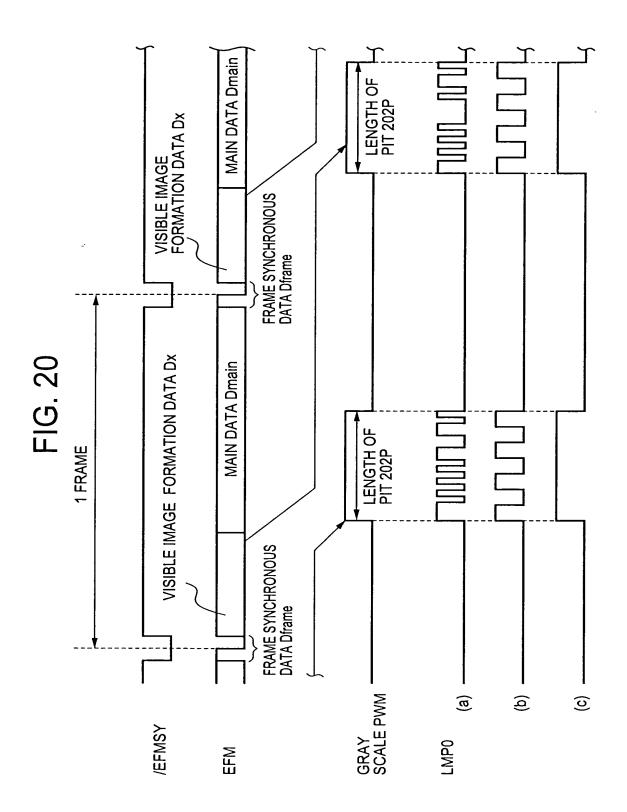Inventor(s): Morito MORISHIMA, et al.
Application No.: Not yet assigned
Docket No.: 393032041900

FIG. 21

FRAME NO.	DETAILS OF SUB CODE DATA Dsub						DETAILS OF VISIBLE IMAGE FORMATION DATA Dx			
	S0						S0			
	S1						S1			
1										
2										
3	P1	Q1	R1	S1	⋯	W1	Cm1	0	PWM1	(0,1,2)×2
4	P2	Q2	R2	S2	⋯	W2	Cm2	0	PWM2	(0,1,2)×2
5	P3	Q3	R3	S3	⋯	W3	Cm3	0	PWM3	(0,1,2)×2
6	P4	Q4	R4	S4	⋯	W4	Cm4	0	PWM4	(0,1,2)×2
7	P5	Q5	R5	S5	⋯	W5	Cm5	0	PWM5	(0,1,2)×2
8	P6	Q6	R6	S6	⋯	W6	Cm6	0	PWM6	(0,1,2)×2
9	P7	Q7	R7	S7	⋯	W7	Cm7	0	PWM7	(0,1,2)×2
10	P8	Q8	R8	S8	⋯	W8	Cm8	0	PWM8	(0,1,2)×2
11	P9	Q9	R9	S9	⋯	W9	Cm9	0	PWM9	(0,1,2)×2
12	P10	Q10	R10	S10	⋯	W10	Cm10	0	PWM10	(0,1,2)×2
13	P11	Q11	R11	S11	⋯	W11	Cm11	0	PWM11	(0,1,2)×2
14	P12	Q12	R12	S12	⋯	W12	Cm12	0	PWM12	(0,1,2)×2
15	P13	Q13	R13	S13	⋯	W13	Cm13	0	PWM13	(0,1,2)×2
16	P14	Q14	R14	S14	⋯	W14	Cm14	0	PWM14	(0,1,2)×2
17	P15	Q15	R15	S15	⋯	W15	Cm15	0	PWM15	(0,1,2)×2
18	P16	Q16	R16	S16	⋯	W16	Cm16	0	PWM16	(0,1,2)×2
19	P17	Q17	R17	S17	⋯	W17	Cm17	0	PWM17	(0,1,2)×2
20	P18	Q18	R18	S18	⋯	W18	Cm18	0	PWM18	(0,1,2)×2
⋯	⋯	⋯	⋯	⋯	⋯	⋯	⋯	⋯	⋯	⋯
95	P93	Q93	R93	S93	⋯	W93	Cm93	0	PWM93	(0,1,2)×2
96	P94	Q94	R94	S94	⋯	W94	Cm94	0	PWM94	(0,1,2)×2
97	P95	Q95	R95	S95	⋯	W95	Cm95	0	PWM95	(0,1,2)×2
98	P96	Q96	R96	S96	⋯	W96	Cm96	0	PWM96	(0,1,2)×2

FIG. 22

DETAILS OF SUB CODE DATA Dsub

FRAME NO.						
1			S0			
2			S1			
3	P1	Q1	R1	S1	...	W1
4	P2	Q2	R2	S2	...	W2
5	P3	Q3	R3	S3	...	W3
6	P4	Q4	R4	S4	...	W4
7	P5	Q5	R5	S5	...	W5
8	P6	Q6	R6	S6	...	W6
9	P7	Q7	R7	S7	...	W7
10	P8	Q8	R8	S8	...	W8
11	P9	Q9	R9	S9	...	W9
12	P10	Q10	R10	S10	...	W10
13	P11	Q11	R11	S11	...	W11
14	P12	Q12	R12	S12	...	W12
15	P13	Q13	R13	S13	...	W13
16	P14	Q14	R14	S14	...	W14
17	P15	Q15	R15	S15	...	W15
18	P16	Q16	R16	S16	...	W16
19	P17	Q17	R17	S17	...	W17
20	P18	Q18	R18	S18	...	W18
...	...	...	...	...	...	...
95	P93	Q93	R93	S93	...	W93
96	P94	Q94	R94	S94	...	W94
97	P95	Q95	R95	S95	...	W95
98	P96	Q96	R96	S96	...	W96

DETAILS OF VISIBLE IMAGE FORMATION DATA Dx

		S0	
		S1	
P1	Q1	Cm1	PWM1	(0,1,2,3,4,5,6)
P2	Q2	Cm2	PWM2	(0,1,2,3,4,5,6)
P3	Q3	Cm3	PWM3	(0,1,2,3,4,5,6)
P4	Q4	Cm4	PWM4	(0,1,2,3,4,5,6)
P5	Q5	Cm5	PWM5	(0,1,2,3,4,5,6)
P6	Q6	Cm6	PWM6	(0,1,2,3,4,5,6)
P7	Q7	Cm7	PWM7	(0,1,2,3,4,5,6)
P8	Q8	Cm8	PWM8	(0,1,2,3,4,5,6)
P9	Q9	Cm9	PWM9	(0,1,2,3,4,5,6)
P10	Q10	Cm10	PWM10	(0,1,2,3,4,5,6)
P11	Q11	Cm11	PWM11	(0,1,2,3,4,5,6)
P12	Q12	Cm12	PWM12	(0,1,2,3,4,5,6)
P13	Q13	Cm13	PWM13	(0,1,2,3,4,5,6)
P14	Q14	Cm14	PWM14	(0,1,2,3,4,5,6)
P15	Q15	Cm15	PWM15	(0,1,2,3,4,5,6)
P16	Q16	Cm16	PWM16	(0,1,2,3,4,5,6)
P17	Q17	Cm17	PWM17	(0,1,2,3,4,5,6)
P18	Q18	Cm18	PWM18	(0,1,2,3,4,5,6)
...	...	...	...	
P93	Q93	Cm93	PWM93	(0,1,2,3,4,5,6)
P94	Q94	Cm94	PWM94	(0,1,2,3,4,5,6)
P95	Q95	Cm95	PWM95	(0,1,2,3,4,5,6)
P96	Q96	Cm96	PWM96	(0,1,2,3,4,5,6)